

Warnings about Installation of Receivers

- The wireless remote uses a very weak infrared light for its signal, which can result in the signal not being received because of the following influences, so take care in where the unit is installed.
 - Inverter or rapid-start type fluorescent lights. (Models without glow lamps)
 - Plasma display or LCD televisions.
 - Direct sunlight or other sources of bright light.

Warnings about Installing Remote Controllers

- If a remote controller is to be operated from a remote control holder that is hung on a wall, turn on the lights in the room as well as any electrical appliances and then check to make sure the air conditioner works with the remote controller in the location where it will be installed. If it works, continue with installation.
- If the air conditioner is to be switched from the main sensor to a remote control sensor, pay attention to the following when installing.
 - Locate where no warm or cold drafts will affect it.
 - Locate in a place free from direct sunlight.
 - Locate where it will not be affected by any other heat/cold source.

Customer Explanation

- Give the Operating Instructions and this manual to the customer after finishing the installation.
- Use the Operating Instructions to explain to the customer how to use and care for the unit.

Things to remember when wired and wireless remotes are installed at the same time

Two remote controllers can be used to control the unit if the wireless remote controller is installed at the same time as the wired remote controller.

(Up to 2 remotes [a wireless remote controller and the wired remote controller] can be installed.)

When using 2 remotes, one or more units can be operated by the remotes.

<Note> When wiring remote controllers, be sure to double-check the terminal numbers of the indoor unit before connecting them so there are no mistakes in the wiring. (Damage will occur if high voltage [e.g. supply voltage] is applied.)

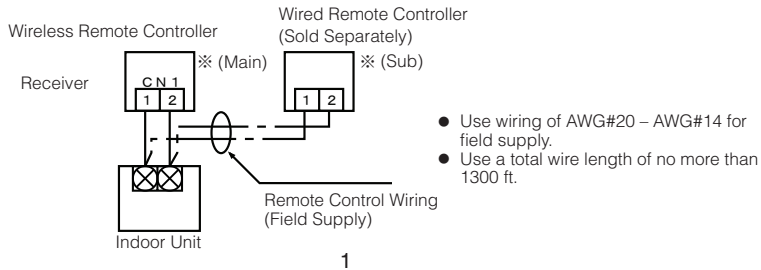
<Note> It is not possible to use more than one wireless remote controller with one indoor unit. (A receiver located separately can be used at the same time.)

<Note> If both a wireless and a wired remote controller are to be installed and used at the same time, one of them must be set up as the sub remote controller.

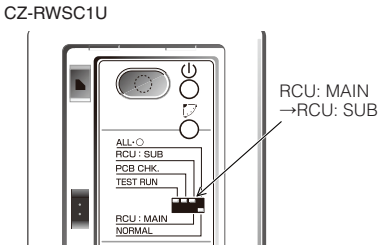
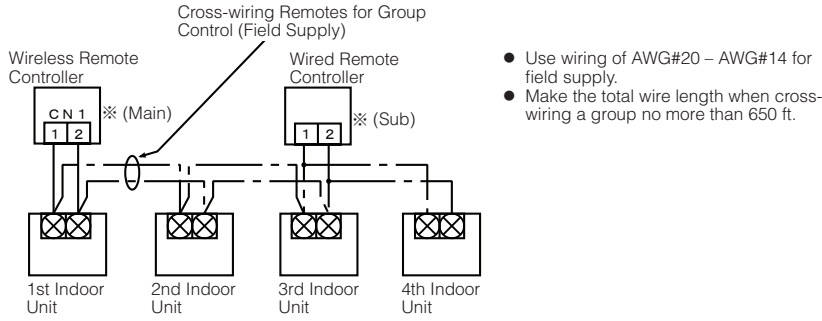
- If the wired remote controller is to be the sub remote, change the wired remote controller to the sub remote.
- If the wireless remote controller is to be the secondary, turn the #3 switch on the wireless receiver (operation panel) from OFF to ON.

When 1 indoor unit is operated by 2 remote controllers:

※ Either of the remotes can be set to main/sub.



If a group of units are to be controlled by 2 remote controllers;
※ Main/sub remote controllers will work regardless of which indoor unit they are installed to.



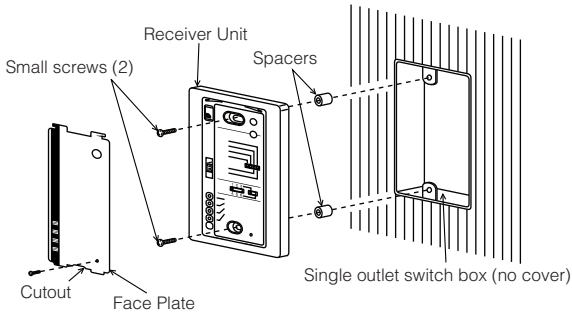
Accessories

No.	Accessories	Quantity	No.	Accessories	Quantity
1	Receiver (Enclosed 7-7/8 in. wiring)	1	7	Operating Instructions	1
2	Remote Controller	1	8	Truss Self-Tapping Screws	2
3	Remote Control Holder	1	9	Small screw	2
4	Dry-cell Batteries	2	10	Wood screw	2
5	Plate mounting	1	11	Cable tie	1
6	Screw (M4×1-9/16 in.)	2	12	Spacer	4
			13	Ceiling installation pattern	1

Installing the Receiver

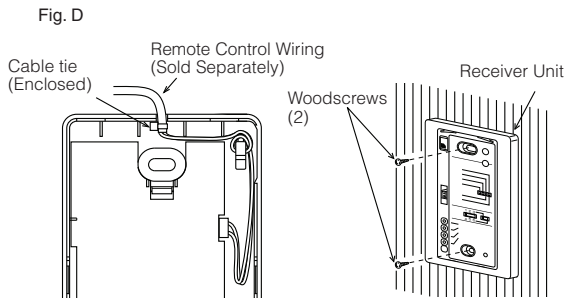
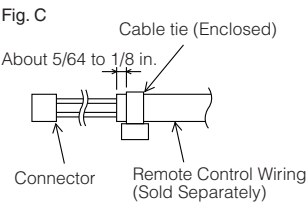
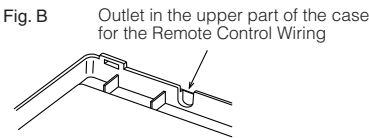
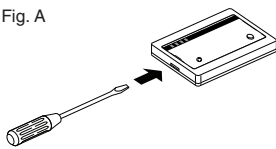
When using a separately installed receiver as a built-in model, install it to the switch box (field supply) shown in the diagram on the right, which has been built into the wall on site in advance.

- 1 Remove the face plate of the receiver by slipping a slotted screwdriver or the like into the cutout on the bottom.
 - 2 Install the receiver with the 2 enclosed small screws.
 - 3 Connect the receiver's wiring (2 cores) with the wiring from the indoor unit. (Refer to the chapter on wiring the receiver)
- When wiring receivers, be sure to double-check the terminal numbers of the indoor unit before connecting them so there are no mistakes in the wiring. (Damage will occur if high voltage [e.g. supply voltage] is applied.)
- 4 Attach the face plate.

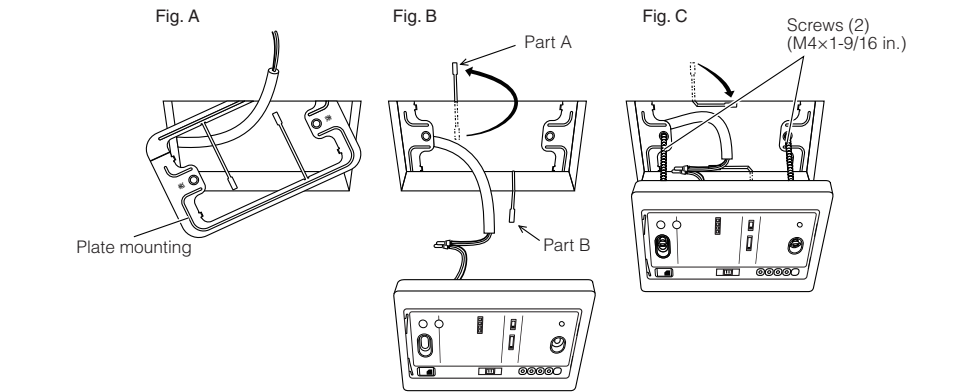


When using a separately installed receiver as an exposed model, attach it to a wall where the receiver can be affixed.

- 1 Put a slotted screwdriver or the like into the groove on the bottom of the receiver unit and twist it to remove the bottom of the case. (Fig. A)
- 2 To enable the receiver's wiring to stick out from the upper part of the case (thin part at center-top), use side-cutters or the like to cut a hole in the case big enough for the remote control wiring (sold separately). (Fig. B)
- 3 Disconnect the wires that were connected at shipment from the connector.
- 4 After installing the remote control wiring (sold separately) at the position in Fig. C with the enclosed cable tie, connect it to the connector on the receiver.
- 5 Shape the remote control wiring at the top of the PCB so it fits inside the receiver and after configuring the wiring like it is in Fig. D, attach the lower case. When doing this, arrange the head of the cable tie so it face sideways.
- 6 Remove the face plate and use the woodscrews (2) to install the receiver unit.
- 7 Use the cord clip that comes enclosed with the remote control wiring to fasten it to the wall.
- 8 Attach the face plate.



When using a receiver that has been installed separately into the ceiling, use the plate mounting.



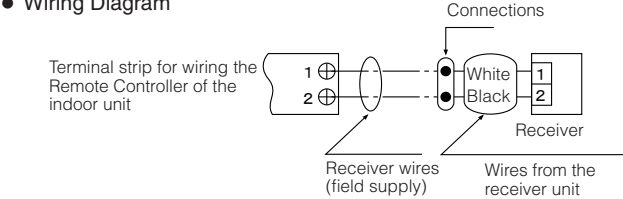
1. Remove the face plate of the receiver by slipping a slotted screwdriver or the like into the cutout on the bottom.
2. Cut out a hole in the ceiling to match the dimensions of the ceiling installaion pattern.
3. Pass the wiring through the plate mounting and put it into the hole. (Fig. A)
4. Bend parts A and B of the plate mounting so they hold onto the ceiling firmly. (Fig. B)
5. Connect the receiver's wiring (2 cores) with the wiring from the indoor unit.
(Refer to the chapter on wiring the receiver.)
When wiring receivers, be sure to double-check the terminal numbers of the indoor unit before connecting them so there are no mistakes in the wiring. (Damage will occur if high voltage [e.g. supply voltage] is applied.)
6. Adjust the enclosed spacers so they are several millimeters thicker than the ceiling material and hold the receiver in place temporarily with the 2 enclosed small screws.
7. Bend parts A and B back so they fit in the opening and are in the gap between the surface of the ceiling and the receiver; then tighten the screws. Do not use too much force when tightening the screws. Doing so may warp or damage the case. Move the receiver by hand and check that it can move just a little. (Fig. C)
8. Attach the face plate.

Wiring the Receiver

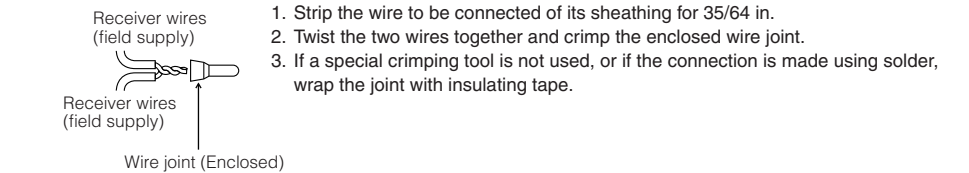
- Use wiring of AWG#20 – AWG#14 for field supply.
- Use a total wire length of no more than 1300 ft.
- Polarity does not matter.

If to be used as an embedded model;

- Wiring Diagram



Enclosed wire joints (2, white)



1. Strip the wire to be connected of its sheathing for 35/64 in.
2. Twist the two wires together and crimp the enclosed wire joint.
3. If a special crimping tool is not used, or if the connection is made using solder, wrap the joint with insulating tape.

The Self-Diagnosis Function Display and What is Detected

Alarm Display in the table below indicates the content of alarms that are displayed when a wired remote controller is connected. For information on how to deal with the alarms, refer to the Mounting Instructions for the indoor unit or to Test Run or servicing materials.

Error Detected	Alarm Display	WL Remote Control LED Display			
		Run	Timer	Standby	Blinking
Communication error in the remote control circuit	E01–E03, E08–E14, E17, E18	●	●	●	
Communication error either in the in/ outdoor operation line or the sub-bus of the outdoor unit	E04–E07, E15, E16, E19–E31	●	●	○	
Operation of indoor protection device	P01, P09–P14	●	○	○	Alternately
Operation of outdoor protection device	P02–P08, P15–P31	○	●	○	Alternately
Error in the indoor thermistor	F01–F03, F10–F11	○	○	●	Alternately
Error in the outdoor thermistor	F04–F09, F12–F28	○	○	○	Alternately
Error in the indoor EEPROM	F29	○	○	●	Simultaneously
Error in the outdoor EEPROM	F30, F31	○	○	○	Simultaneously
Error related to the compressor	H01–H31	●	○	●	
Error in indoor settings	L01–L03, L05–L09	○	●	○	Simultaneously
Error in outdoor settings	L04, L10–L31	○	○	○	Simultaneously
Inconsistency in Air/Heat (Including an auto-temp setting for a model without auto-temp settings)		○	○	○	Alternately
Oil Alarm (Same as operation of outdoor protection device)		○	●	○	Alternately
Test Run		○	○	○	Simultaneously

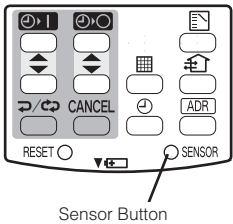
● : Off / ○ : On / ○ : Blinking (0.5 sec. intervals)

Room Temperature Sensor Settings

Common to All Models

- The indoor unit and the wireless remote controller are equipped with indoor temperature sensors. The sensing of indoor temperature works via one of them.
- When the unit is shipped, it is set to the indoor unit, but to switch to the remote controller, press the sensor button (diagram at right) inside the remote controller's cover and then check to make sure that Main Sensor on the LCD screen goes off.

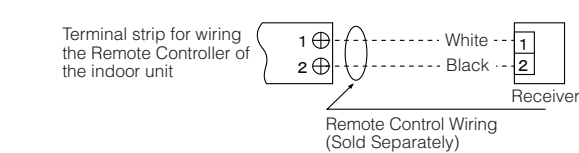
<Note> Even when the sensor switch has been set to the remote controller, if the unit does not receive any room temperature data from the remote controller for ten minutes, it automatically switches back to the indoor unit sensor, so be sure to install the remote controller facing the receiver.



Sensor Button

If it is to be used as an exposed model:

- Wiring Diagram



- Use remote control wiring (sold separately) for wiring a separately installed receiver.

1. For instructions on how to install a remote control wiring (sold separately), refer to the chapter on Using as an Embedded Model in Installing Separate Receivers.
2. If a remote control wiring (sold separately) is to be used, refer to the Mounting Instructions attached to the remote control wiring.

- <Note 1> When wiring remote controllers, be sure to double-check the terminal numbers of the indoor unit connecting them so there are no mistakes in the wiring. (Damage will occur if high voltage [e.g. supply voltage] is applied.)
- <Note 2> If the wiring to the operation panel is bundled together with other wiring, such as the incoming line from the power source, it can cause a malfunction, so avoid doing so.
- <Note 3> If something causes the unit's power source to make noise, it will be necessary to resolve the problem, such as by installing a noise filter.

Setting Address Switches

- When more than one receiver and remote controllers are installed in the same room, setting up addresses allows them to avoid interfering with each other.
- Refer to the Operating Instructions for information on how to change the addresses of the remote controllers.
- Changing the address of a receiver can be done after removing the screw to the receiver's PCB cover. Once the change is complete, put the cover back in place; while holding the wiring with the cable clamp, tighten its screw.

Address Display on the Remote Controller	ALL	1	2		6
Position of the Receiver's Address Switch	It doesn't matter where the receiver's address switch is.				

Test Operation

Implementing a Test Run

1. Remove the face plate of the receiver's PCB and turn the DIP switch to RUN/On (Down → Up) and operate the wireless remote controller with its Start/Stop button.
 2. During a test run, all display lamps on the display will light up.
 3. During a test run, it is not possible to adjust the temperature.
 4. After completing a test run, be absolutely sure to return the Test Run switch to OFF (Up → Down) and make sure none of the display lamps are blinking. Also, put the face plate back in place.
- <Note 1> This is hard on the device, so only use this for the test run.
- <Note 2> After turning on the power, the unit will not receive any commands from the remote controller for about 1 minute. This is not an error. (In fact it does receive signals, but they are cancelled.)
- <Note 3> Make sure to operate while the indoor unit is stopped.
- <Note 4> The address of indoor unit is set to "ALL" at the time of the shipment.

Setting Up Remote Control Functions

The functions of the wireless remote can be set on site.

(These settings are saved in nonvolatile memory in the remote controller, so even when its batteries are changed, the settings do not revert to the defaults.)

<Note> The operation of the air conditioner can be impacted, depending on the settings made, so only service personnel should make the settings. Furthermore, making changes to these settings may cause actual operation to deviate from what is printed in the Operating Instructions, so be sure to explain this to the customer fully.

Making Settings (Do with unit stopped.)

1. Holding down the Swing/Wind Direction + OFF Timer () + Mode Select buttons at the same time for 4 or more seconds makes the display switch to the setting screen. (See Diagram Below.)
2. Use the Temperature setting buttons, () / (), to select the number of the item to be set.
3. Use the ON Timer buttons, () / (), to change settings.
4. The settings are saved with the Once/Every Day button. When this is done, the settings display of the LCD changes from blinking to light.
5. If other settings are to be changed as well, repeat steps 2 to 4.
6. When all settings have been made, press the Start/Stop button.

Example: Operation mode setting screen

Item Number & Setting Item	Setting Content	Setting when Shipped
1 Operation Mode	☀️ → ☀️ → ☀️ → ☀️ → ☀️ → ☀️ → ☀️ (Note 1)	☀️
2 Flap Display	☀️ → ☀️ → ☀️ → (No Display) (Note 1)	☀️
3 Select Fan Speed	☀️ → ☀️ → ☀️ → (No Display)	☀️
4 Display of Set Temperature	°F → Setting Off (Note 2) → °C	°F
5 Time Display	AM/PM → 24 Hour (No Display)	AM/PM
6 Ventilation Fan ON/OFF	Off (No Display) → On	OFF (Note 3)
7 Cool temp Max	41 – 95°F	86°F
8 Cool temp Min	41 – 95°F	64°F
9 Heat temp Max	41 – 95°F	78°F (Note 4)
10 Heat temp Min	41 – 95°F	60°F
11 Dry temp Max	41 – 95°F	86°F
12 Dry temp Min	41 – 95°F	64°F
13 Auto temp Max	41 – 95°F	80°F
14 Auto temp Min	41 – 95°F	62°F
16 Address Setting Max Value	00 (ALL only) → 01 – 31	06 (Note 5)
17 Heat temp Max ON/OFF	JP (Heater Max Temp Change Off) → EP (On)	JP

- Note 1 While the unit is in the swinging mode (Swing/Wind Direction), the flap cannot be stopped in a desired position.
- Note 2 When Setting OFF is selected, "°C" is displayed on the LCD screen.
- Note 3 You can toggle between ON and OFF by pressing Ventilation for 4 seconds or more.
- Note 4 If the Heater Max ON/OFF setting is not changed to EP (ON), the setting change will not be reflected.
- Note 5 This is the number of addresses that can be set in the address change mode. Do not set it to 07 or above.